Rural-Urban Differences in Protective Factors in Respondents exposed to adverse childhood experiences (ACES)

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Background

Adverse Childhood Experiences (ACEs)

- Traumatic events that occur in a child's life between birth and 18 years of age.
- ACE exposure linked to risky health behaviors and chronic health conditions in adulthood.
- ACE exposure may also result in an intergenerational cycle of experiences.

Background

- Yet, exposure to ACEs does not guarantee poor long-term health for every exposed child
- Development of resilience, such as a safe, stable, and nurturing relationship (SSNRs)
- With nearly thirteen million children currently living in rural America, the examination and prevention of ACEs in this population is important

Research Question

- What is the impact of the presence of a protective adult during childhood on adult physical and mental health among respondents to the SC Behavioral Risk Factor Surveillance System (BRFSS)?
- Sample: Respondents to the 2016 South Carolina BRFSS (n=7,790; rural n=2,004)

Measures of childhood adversity

ACES asked about in the CDC/BRFSS

- Household mental illness
- Household substance abuse (alcohol)
- Household substance abuse (drugs)
- Household incarceration
- Parental separation/divorce
- Household domestic violence
- Emotional abuse
- Physical Abuse
- Sexual abuse

Protective Factor

- For how much of your childhood was there an adult who made you feel safe and protected?”
- These questions were further categorized into three levels

1) little to never of the time

2) some to most of the time

3) all of the time.

Health Outcomes

Self-reported:

Poor or Good Health

Low to moderate versus frequent mental distress

Covariates

- Sex, age, race/ethnicity, educational attainment, and income
- Chosen based on the Andersen behavioral model

Rural-Urban Differences

- Rural-urban differences in the presence of a protective adult were not significant
- The study was further delimited to rural respondents, as rural children experience:

higher levels of poverty,

have more limited access to care coordination,

health care,

and social services than their counterparts in urban areas

Sample Demographics (n=2,004)

- Female (52.2%)
- Non-Hispanic White (63.6%)
- Fifty years of age or older (18.3%)
- Over half (55.5%) of the respondents had a high school education or less.
- (31.0%) of the sample made less than $25,000 a year
- Twenty-percent (22.2%) of respondents reported poor health; 16.4% of the sample reporting frequent mental distress.

Results

Protective factor	Poor Health		Frequent Mental Distress	
	Point Estimate	95% CI	Point Estimate	95% CI
Model 1: Exposure to four or more ACES	1.60	1.56-1.63	2.12	2.08-2.16
Model 2: Exposure to four or more ACES and had an adult who made you feel safe and protected *some to most of the time*	0.28	0.27-0.30	0.12	0.12-0.13
Model 3: Exposure to four or more ACES and had an adult who made you feel safe and protected *all of the time*	0.34	0.32-0.37	0.18	0.17-0.19

Conclusions

- First study to examine the presence of a protective adult during childhood on adult physical and mental health among rural individuals exposed to ACEs
- Presence of a protective adult in may moderate the long-term effects on mental and physical health for those exposed to high numbers of ACEs

Limitations

- Cross-sectional
- Self-reported
- May be influenced by recall bias

Creating resilience among rural families

- Protective factors can be part of the prevention/intervention strategy to reduce these intergenerational effects
- Two-generation approach to policies and programs for rural families